

Burden of Cancer

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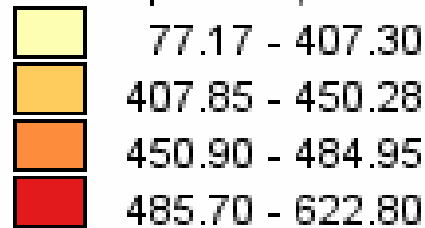
Diagnosis and Treatment

Age-Adjusted Invasive Cancer Incidence Rates in Mississippi All Sites, 2003-2006 By County

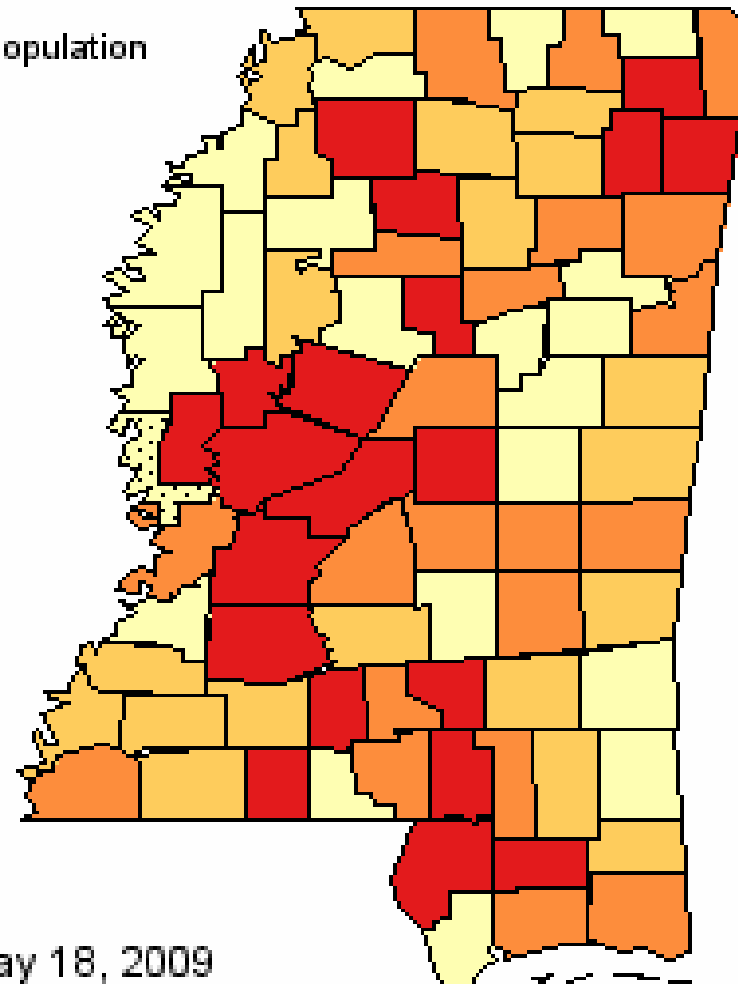
Age-Adjusted to the 2000 U.S. Standard Million Population

Mississippi Rate: 459.22

Rate per 100,000



 Unstable



Created May 18, 2009
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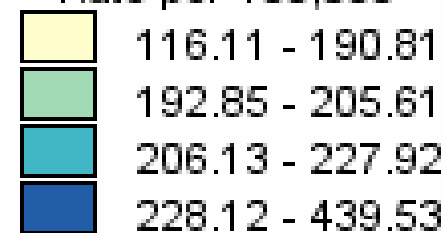
The population estimates for 2005 are adjusted to account for population shifts due to Hurricane Katrina. For more information on the population adjustments, go to (<http://www.seer.cancer.gov/popdata/>).

Age-Adjusted Cancer Mortality Rates in Mississippi All Sites, 2003-2006 By County

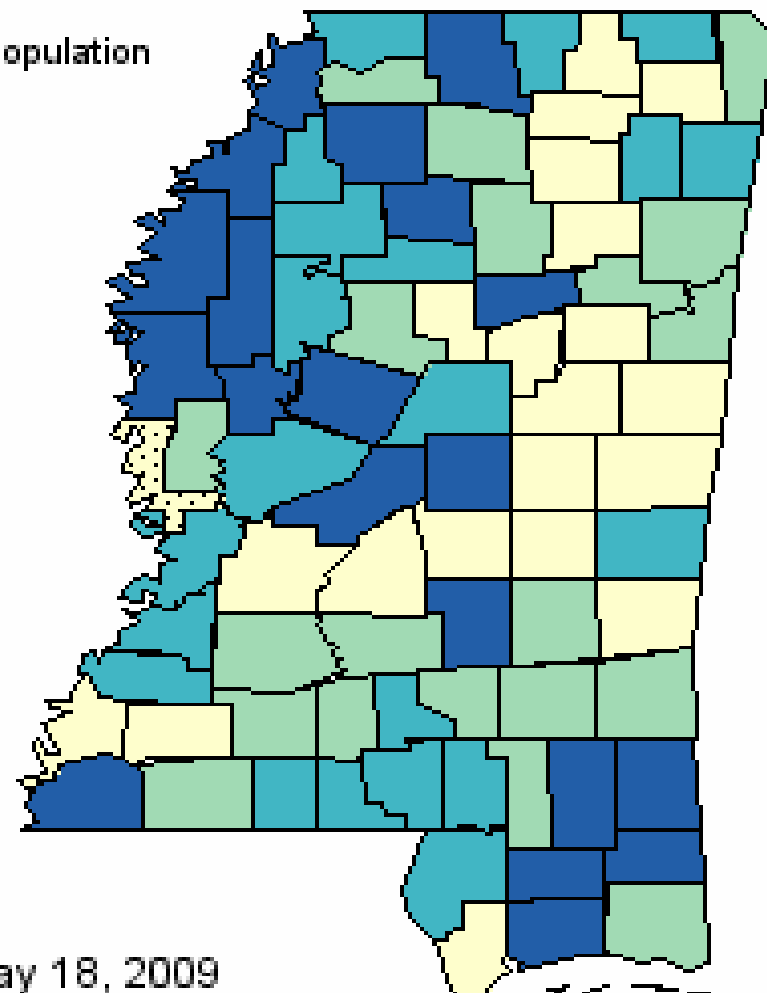
Age-Adjusted to the 2000 U.S. Standard Million Population

Mississippi Rate: 208.51

Rate per 100,000



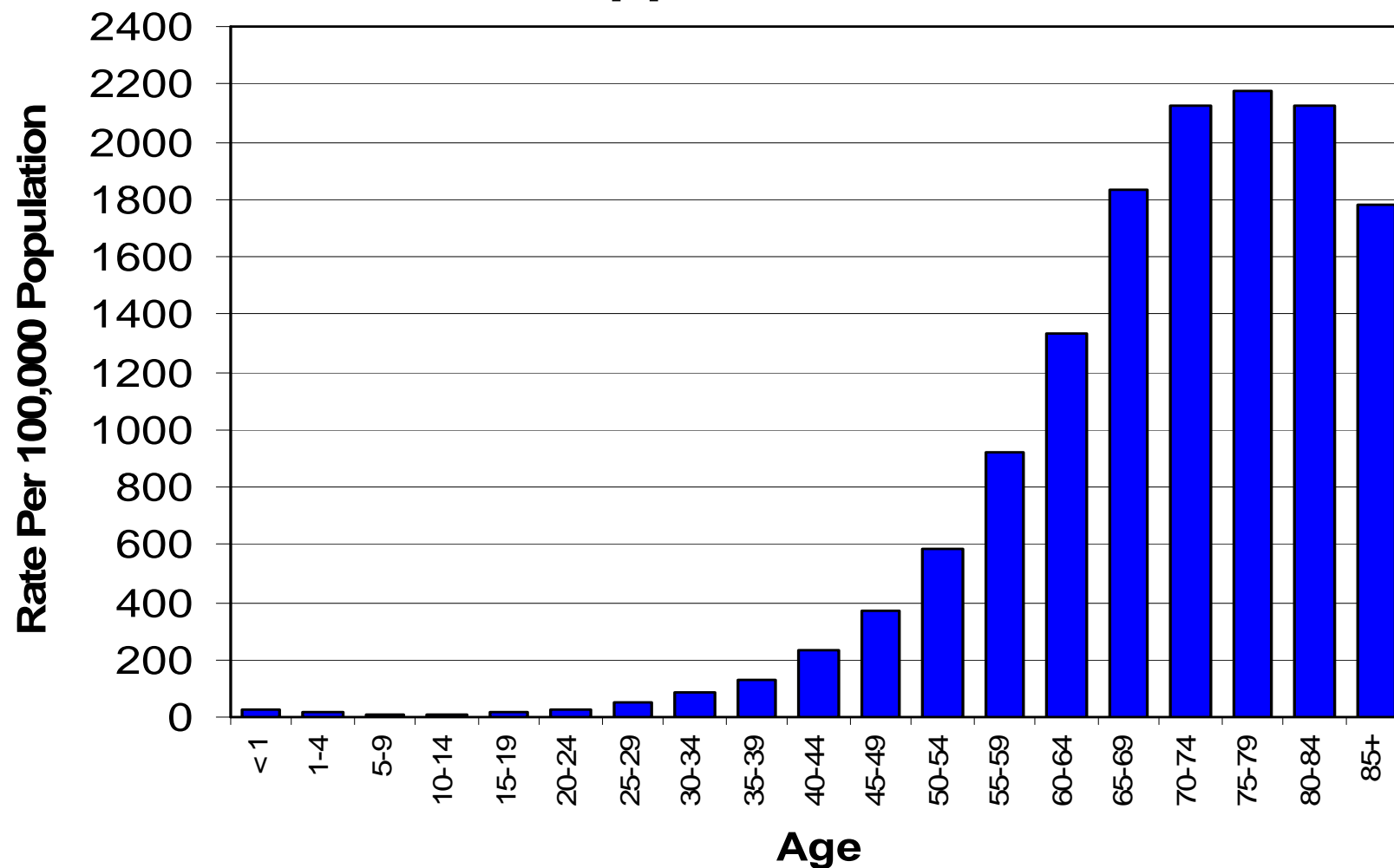
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Age-Specific Cancer Rates Mississippi, 2003-2006



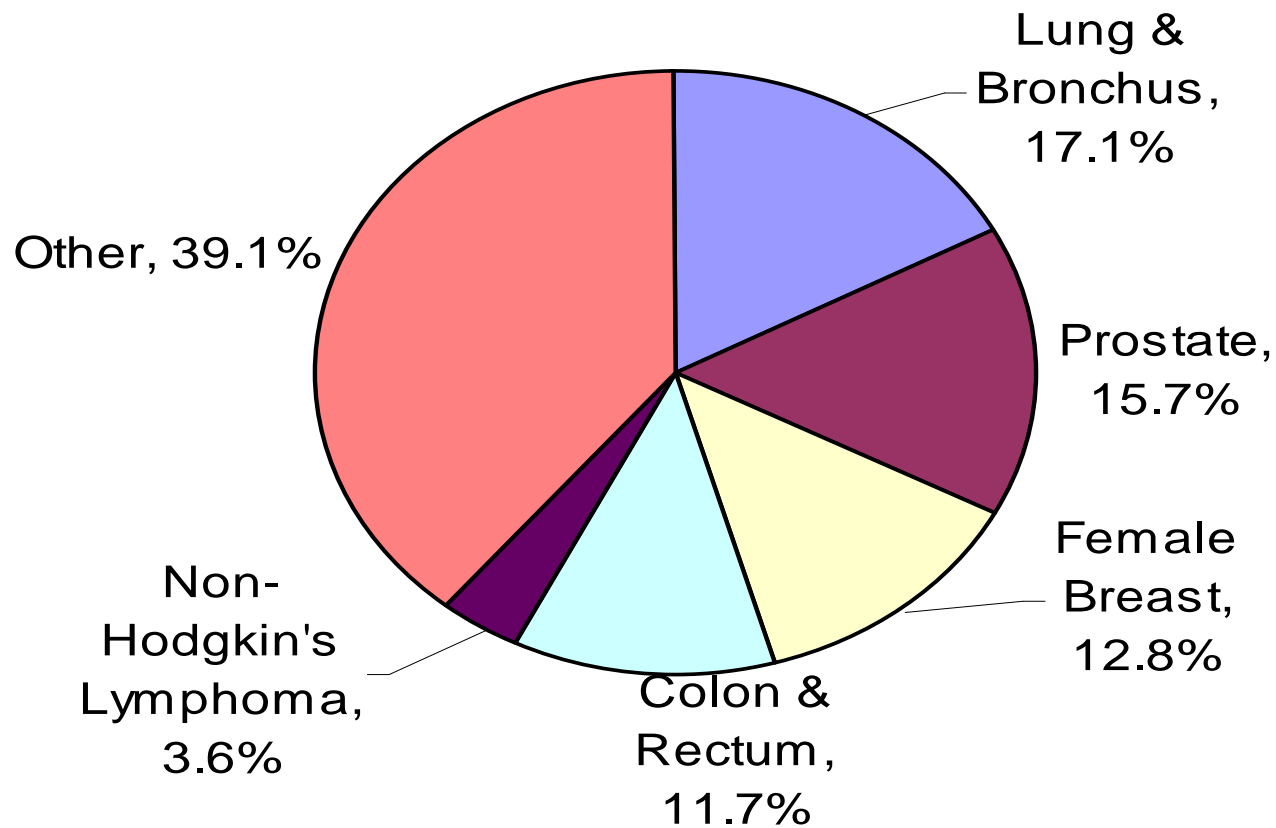
Source: Mississippi Cancer Registry

Childhood Cancers

- Between 2003 and 2006, 471 cancer cases were diagnosed among children ages 0-19.
 - Common Types
 - Leukemia – 118 cases
 - Brain and Central Nervous System – 91 cases
 - Lymphoma – 64 cases
 - Kidney and Renal Pelvis – 24 cases
 - Neuroblastoma – 20 cases
 - 17 cases of Melanoma (skin) were diagnosed in the 15-19 age group between 2003 and 2006.

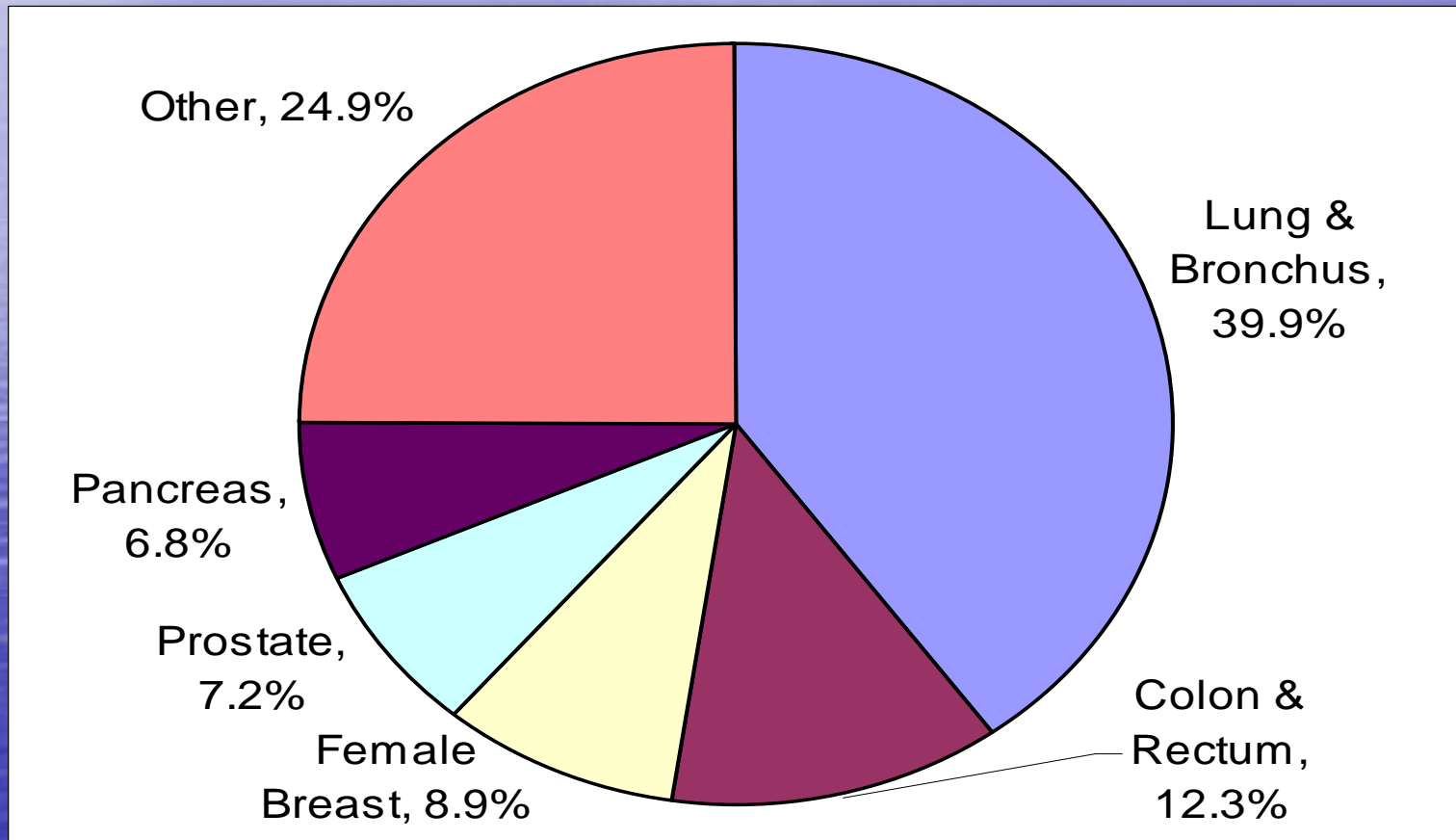
Source: Mississippi Cancer Registry

Invasive Cancer Incidence Mississippi, 2003-2006



Source: Mississippi Cancer Registry

Cancer Mortality Mississippi, 2003-2006



Source: Mississippi Cancer Registry

2005 Incidence and Mortality Rates

Site	Incidence			Mortality		
	MS	US	Rank	MS	US	Rank
All Cancer	558.2	533.8	17	208.3	184.1	5
Female Breast*	104.5	117.7	49	25.9	24.0	10
Colon & Rectum	51.6	48.3	16	19.9	17.4	3
Lung & Bronchus	76.2	67.7	10	64.9	52.8	6
Prostate*	167.8	142.4	4	32.2	24.7	2
Cervix Uteri*	7.3	8.1	32	3.7	2.4	1
Oral Cavity & Pharynx	11.4	10.3	11	4.0	2.5	1
Melanoma (Skin)	13.7	18.5	43	2.4	2.7	39

* Sex-specific population used for sex-specific cancer.

Source: *United States Cancer Statistics*, 2005; Rates per 100,000 population and age-adjusted to 2000 U.S. Standard Million Population

Barriers to Cancer Diagnosis and Treatment

- Lack of Health Insurance or method to pay
- Access to care and/or access to quality care
- Inability to effectively communicate with provider
- Missed appointments due to fear, travel time, lack of transportation, or lost work time.
- Belief that cancer means death

Barriers to Treatment

- Patients not always receiving standard of care
 - Example: Stage III colon cancer should be treated with surgery and chemotherapy
 - Percentage of patients diagnosed in 2006 receiving care at one of the 11 Commission on Cancer Approved facilities in Mississippi who received the standard of care: 43.53%
 - Percentage of patients diagnosed in 2006 receiving care at one of the Commission on Cancer Approved facilities in the United States who received the standard of care: 54.22%

Source: National Cancer Database

Barriers to Treatment

- Under-utilization of Clinical Trials
 - Only 3 to 5 percent of adult cancer patients enroll in clinical trials when up to 20 percent are eligible.
 - Uninsured patients represent only 5.4% of participants in clinical trials

Source: American Cancer Society



Screening and Early Detection

Cancers with Screening

- Oral Cavity
- Breast
- Colon/Rectum
- Prostate
- Skin
- Cervical

Colon/Rectum Cancer

- Adults aged 50+ who have ever had a sigmoidoscopy or colonoscopy: 56.4%
 - Rank States and D.C.: 42
 - Females (56.5%) did better than Males (56.2%)
 - Whites (60.0%) did better than Blacks (47.8%)
 - Higher income and education = more screening

Source: 2008 Behavioral Risk Factor Surveillance System

Stage of Disease at Diagnosis

Colon/Rectum Cancer

Stage	Overall	White Males	White Females	Black Males	Black Females
In Situ	5.6%	5.0%	4.3%	6.8%	7.9%
Local	37.5%	37.2%	38.7%	32.0%	40.1%
Regional	31.5%	33.2%	30.8%	31.6%	30.1%
Distant	18.1%	17.8%	18.0%	22.2%	15.1%
Unknown	7.4%	6.9%	8.1%	7.5%	6.8%

Source: Mississippi Cancer Registry

Female Breast Cancer

- Women aged 40+ who have had a mammogram within the past two years: 68.9%
 - Rank States and D.C.: 45
 - Blacks (69.9%) did better than Whites (69.1%)
 - Higher income and education = more screening

Source: 2008 Behavioral Risk Factor Surveillance System

Stage of Disease at Diagnosis Female Breast Cancer, 2006

Stage	Overall	White Females	Black Females
In Situ	14.9%	15.2%	13.9%
Local	45.1%	47.4%	39.8%
Regional	31.1%	29.2%	35.6%
Distant	5.9%	5.0%	8.2%
Unknown	2.9%	3.1%	2.6%

Source: Mississippi Cancer Registry

Cervical Cancer

- Women aged 18+ who have had a Pap test within the past three years: 82.5%
 - Rank States and D.C.: 31
 - Blacks (85.7%) did better than Whites (81.2%)
 - Higher income and education = more screening

Source: 2008 Behavioral Risk Factor Surveillance System

Stage of Disease at Diagnosis Cervical Cancer, 2006

Stage	Overall	White Females	Black Females
In Situ	*	*	*
Local	39.4%	45.5%	32.0%
Regional	39.4%	35.1%	44.0%
Distant	14.2%	14.3%	14.7%
Unknown	7.1%	5.2%	9.3%

*The Mississippi Cancer Registry does not collect in situ cervical cancer.

Source: Mississippi Cancer Registry

Prostate Cancer

- Men aged 40 + who have had a PSA test within the past two years: 54.5%
 - Rank States and D.C.: 29
 - Whites (57.2%) did better than Blacks (49.8%)
 - Higher income and education = more screening

Source: 2008 Behavioral Risk Factor Surveillance System

Stage of Disease at Diagnosis Prostate Cancer, 2006

Stage	Overall	White Males	Black Males
In Situ	*	*	*
Local	85.6%	85.9%	84.2%
Regional	8.1%	9.0%	7.1%
Distant	3.3%	2.8%	4.5%
Unknown	3.0%	2.3%	4.2%

*The Mississippi Cancer Registry does not collect in situ prostate cancer.

Source: Mississippi Cancer Registry

Oral Cavity Cancer

- Adults who have visited the dentist or dental clinic within the past year for any reason: 59.4%
 - Rank States and D.C.: 50
 - Females (61.8%) did better than Males (56.8%)
 - Whites (63.7%) did better than Blacks (52.5%)
 - Higher income and education = more screening

Source: 2008 Behavioral Risk Factor Surveillance System

Stage of Disease at Diagnosis Oral Cavity & Pharynx Cancer, 2006

Stage	Overall	White Males	White Females	Black Males	Black Females
In Situ	0.8%	0.5%	2.2%	0.0%	0.0%
Local	33.2%	38.6%	43.0%	11.0%	21.7%
Regional	43.8%	42.4%	34.4%	58.9%	43.5%
Distant	15.6%	13.6%	12.9%	24.7%	17.4%
Unknown	6.6%	4.9%	7.5%	5.5%	17.4%

Source: Mississippi Cancer Registry

Stage of Disease at Diagnosis Melanoma (Skin), 2006

Stage	Overall	White Males	White Females
In Situ	37.8%	40.7%	34.4%
Local	51.0%	48.6%	55.5%
Regional	4.6%	3.0%	6.6%
Distant	3.9%	4.5%	1.6%
Unknown	2.8%	3.2%	2.0%

Source: Mississippi Cancer Registry

Barriers to Screening

- Education
 - Not aware of the need to be screened, types of screening needed and when to be screened
 - Cancer does not run in the family – Don't understand risk
 - Not having problems – why get screened
- Physician didn't tell them to get screened
- Time
- Fear of procedure and fear of having cancer detected

Barriers to Screening

- Lack of Health Insurance
 - According to 2008 BRFSS, 76.9% of adult Mississippians ages 18-64 had any kind of healthcare coverage.
 - 4th Lowest among the U.S. states and D.C.
 - Whites (82.1%) did better than Blacks (68.5%)
- Lack of knowledge that insurance covers screenings or lack of coverage for preventive services
- Perceived discrimination



Cancer Prevention

Keys to Prevention

- Maintain a healthy weight
- Eliminate tobacco use
- Reduce alcohol consumption
- Eat a healthy diet
- Exercise
- Reduce exposure to the sun
- Not engaging in risky sexual behaviors
- HPV Vaccination
- Colorectal and Cervical Cancer Screening

Exercise

- Mississippians who participated in physical activity in the last month: 67.4%
 - Rank among U.S. states and DC: Last
 - Males (70.4%) did better than females (64.7%)
 - Whites (70.2%) did better than Blacks (62.0%)
 - Higher income and education = more exercise

Source: 2008 Behavioral Risk Factor Surveillance System

Why Don't We Exercise

- Time – Easier when young
- Environment – MS Summer (Hot & Humid)
- Safety
- Don't like exercise
- Women – Feel guilty taking time for self
 - Societal pressure in minorities to care for others, not self
- Can't afford the gym membership

Obesity

- Mississippians who are obese (BMI \geq 30): 33.3%
 - Rank among U.S. states and DC: First
 - Males (31.5%) did better than females (35.0%)
 - Whites (29.3%) did better than Blacks (41.2%)
 - More education = Lower percentage obese

Source: 2008 Behavioral Risk Factor Surveillance System

Fruits and Vegetables

- Percent of Mississippians consuming five servings of fruits and vegetables each day: 18.1%
 - Rank among U.S. states and DC: 50th
 - Females (19.5%) did better than males (16.6%)
 - Whites (18.6%) did better than Blacks (16.3%)
 - Higher education = more fruits and vegetables

Source: 2007 Behavioral Risk Factor Surveillance System

Why Don't We Eat Right?

- Meals increasingly eaten outside of home
 - Portion sizes at restaurants increased
 - Restaurants of choice most of the time – Fast Food
 - Fast food – High in saturated fat/low in many nutrients
- Cookbooks have increased portion sizes
- Low income – Choose lower priced foods that also contain low nutrients and high fat

Why Don't We Eat Right?

- Perception that nutritious tastes bad
 - Don't know how to prepare the foods we like in a nutritious manner
- Don't understand the disease/diet relationship

Smoking

- Adults who are current smokers: 22.7%
 - Rank among U.S. states and DC: 7th
 - Females (20.2%) did better than Males (25.3%)
 - Blacks (20.6%) did better than Whites (23.4%)
 - Lower income and education = higher smoking rate

Source: 2008 Behavioral Risk Factor Surveillance System

Youth Tobacco Use

- 2007 YRBS
 - 58% of Mississippi students have ever smoked cigarettes
 - 19% of Mississippi students have smoked cigarettes during the past month
 - 7% of Mississippi students have smoked cigarettes on 20 or more of the past 30 days
 - 8% of Mississippi students have used smokeless tobacco during the past month
 - 15% of Mississippi students have smoked cigars during the past month

Reasons People Smoke

- Most smokers start in their teens to appear more mature, to experiment or to be like friends.
- Powerful addiction that is hard to break
- Control weight
- Deal with stress – financial, personal, work
- Deal with other addictions
- Like smoking

Youth Sexual Behavior

- 2007 YRBS
 - 60% of Mississippi students have ever had sexual intercourse
 - 23% of Mississippi students have ever had four or more sex partners
 - 42% of Mississippi students have had sexual intercourse in the past three months
 - 33% of Mississippi students did not use a condom during last sexual intercourse

The background of the slide is a photograph of a vast, deep blue ocean stretching to the horizon. The sky above is a lighter blue with wispy white clouds. A bright reflection of the sun is visible on the left side of the water's surface. The word "Survivorship" is centered in the middle of the image in a white, bold, sans-serif font with a thin black outline.

Survivorship

Survivors

- Cancer survivors are individuals who have been diagnosed with cancer and the people affected by their cancer diagnosis
- According to CDC, 66% of people diagnosed with cancer are expected to live at least five years after diagnosis
- Approximately 14% of all survivors were diagnosed more than 20 years ago.

Cancer Survivorship

- According to the American Cancer Society, 1 in 5 people with health insurance who are diagnosed with cancer use all or most of their savings because of the financial cost of dealing with cancer.

Cancer Survivorship

- Late effects
 - Side effects that occur more than five years after diagnosis
 - Problems from surgery
 - Heart problems
 - Lung problems
 - Endocrine system problems
 - Bone, joint and soft tissue problems
 - Brain, spinal cord and nerve problems
 - Second cancers (14% higher risk of developing new cancer)
 - Fatigue

Cancer Survivorship

- Late effects
 - Learning, memory, and attention difficulties
 - Dental and vision problems
 - Digestive problems
 - Emotional difficulties
 - Anxiety
 - Depression
 - Fear of recurrence
 - Anger
 - Interpersonal relationships (body image, sexuality)
 - Post-traumatic stress disorder

Childhood Cancer Survivorship

- Almost 80% of children diagnosed with cancer will be alive at least five years later, according to the NCI
- Problems children encounter
 - Learning problems
 - Attention
 - Fatigue
 - Decline in intellectual ability over time
 - Ability to keep up in social conversation
 - Self-esteem
 - Feeling different from peers

Childhood Cancer Survivorship

- Problems children encounter
 - Stress and anxiety
 - Depression
 - Post-traumatic stress disorder
 - Fertility problems
 - Obtaining employment
 - Health Insurance
 - Cost of Medication

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